# FEP Medical Policy Manual

## FEP 2.01.100 Dry Needling of Trigger Points for Myofascial Pain

**Effective Policy Date:** **July 1, 2020**

**Original Policy Date:** **December 2019**

**Related Policies:**

None

# Dry Needling of Trigger Points for Myofascial Pain

## Description

Trigger points are discrete, focal, hyperirritable spots within a taut band of skeletal muscle fibers that produce local and/or referred pain when stimulated. Dry needling refers to a procedure whereby a fine needle is inserted into the trigger point to induce a twitch response and relieve the pain.

## OBJECTIVE

The objective of this evidence review is to evaluate whether dry needling of myofascial trigger points improves the net health outcome in patients with myofascial pain.

## POLICY STATEMENT

Dry needling of trigger points for the treatment of myofascial pain is considered **investigational**.

## POLICY GUIDELINES

None.

# BENEFIT APPLICATION

Experimental or investigational procedures, treatments, drugs, or devices are not covered (See General Exclusion Section of brochure).

# FDA REGULATORY STATUS

Dry needling is considered a procedure and, as such, is not subject to regulation by the U.S. Food and Drug Administration.

# RATIONALE

## Summary of Evidence

For individuals who have myofascial trigger points associated with neck and/or shoulder pain who receive dry needling of trigger points, the evidence includes randomized controlled trials (RCTs) and systematic reviews. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. As reported in a systematic review of literature published through 2013, only 1 of 8 studies found significantly greater reductions in pain with dry needling compared with other treatments. Two more recent RCTs comparing dry needling with manual therapy did not find significantly better outcomes after dry needling. A second systematic review of techniques to treat myofascial pain included 15 studies of dry needling for neck or shoulder pain published through 2017. Studies had multiple methodological limitations, and the reviewers concluded that the evidence for dry needling was not greater than placebo. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have myofascial trigger points associated with plantar heel pain who receive dry needling of trigger points, the evidence includes RCTs, quasi-experimental studies, and a systematic review. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The systematic review, which included 3 quasi-experimental studies, rated study quality as poor. One RCT was double-blind and sham-controlled; it found a statistically significant greater reduction in pain in the dry needling group than in the sham group but the difference was not clinically significant (ie, it did not meet the prespecified minimally important difference). The other RCT, a single-blind trial comparing dry needling with usual care, found a significantly greater reduction in pain at the end of active treatment but not at follow-up one month later. Moreover, range of motion outcomes did not differ significantly between groups at either time point. To date, the studies have not demonstrated a statistical or a clinical benefit for dry needling. Additional RCTs, especially those with a sham-control group, would strengthen the evidence base. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have myofascial trigger points associated with temporomandibular myofascial pain who receive dry needling of trigger points, the evidence includes an RCT. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. One double-blind, sham-controlled randomized trial was identified; it found that one week after completing the intervention, there were no statistically significant differences between groups in pain scores or function (unassisted jaw opening without pain). There was a significantly higher pain pressure threshold in the treatment group. Additional RCTs, especially those with a sham-control group, are needed. The evidence is insufficient to determine the effects of the technology on health outcomes.

# SUPPLEMENTAL INFORMATION

## Practice Guidelines and Position Statements

### American Physical Therapy Association

In 2012, an educational resource paper by the American Physical Therapy Association defined dry needling as "a skilled intervention used by physical therapists (where allowed by state law) that uses a thin filiform needle to penetrate the skin and stimulate underlying myofascial trigger points, muscular, and connective tissues for the management of neuromusculoskeletal pain and movement impairments."[15,]

In 2013, the Association issued an educational resource paper that included the following indications for dry needling: radiculopathies, joint dysfunction, disc pathology, tendonitis, craniomandibular dysfunction, carpal tunnel syndrome, whiplash-associated disorders, and complex regional pain syndrome.[1,]

### American Academy of Orthopaedic Physical Therapists

In 2009, the American Academy of Orthopaedic Physical Therapists issued a statement that dry needling fell within the scope of physical therapist practice.[16,] In support of this position, the Academy stated that "dry needling is a neurophysiological evidence-based treatment technique that requires effective manual assessment of the neuromuscular system.... Research supports that dry needling improves pain control, reduces muscle tension, normalizes biochemical and electrical dysfunction of motor endplates, and facilitates an accelerated return to active rehabilitation."

## U.S. Preventive Services Task Force Recommendations

Not applicable.

## Medicare National Coverage

There is no national coverage determination. In the absence of a national coverage determination, coverage decisions are left to the discretion of local Medicare carriers.

# REFERENCES


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## POLICY HISTORY - THIS POLICY WAS APPROVED BY THE FEP® PHARMACY AND MEDICAL POLICY COMMITTEE ACCORDING TO THE HISTORY BELOW:

| Date | Action | Description |
|---|---|---|
| December 2019 | New policy | Policy created with literature review through February 5, 2019. Dry needling of trigger points for the treatment of myofascial pain is considered investigational. |
| June 2020 | Replace policy | Policy updated with literature review through February 24, 2020; reference added. Policy statement unchanged. Title changed to "Dry Needling of Trigger Points for Myofascial Pain." |